

WebBoard 3.0. Documentation by Susan B. Peck and Jay York. O'Reilly Software, Sebastopol, CA. (1998). \$699.00 (includes CD ROM and 350-page book).

No table of contents.

Modern Compiler Implementation in Java: Revised and Expanded Edition. By Andrew W. Appel. Cambridge University Press, Cambridge, MA. (1998). 548 pages. \$54.95.

Bioinformatics: The Machine Learning Approach. By Pierre Baldi and Søren Brunak. MIT Press, Cambridge, MA. (1998). 351 pages. \$40.00.

Contents:

Series Foreword. Preface. 1. Introduction. 2. Machine learning foundations: The probabilistic framework. 3. Probabilistic modeling and inference: Examples. 4. Machine learning algorithms. 5. Neural networks: The theory. 6. Neural networks: Applications. 7. Hidden Markov models: The theory. 8. Hidden Markov models: Applications. 9. Hybrid systems: Hidden Markov models and neural networks. 10. Probabilistic models of evolution: Phylogenetic trees. 11. Stochastic grammars and linguistics. 12. Internet resources and public databases. A. Statistics. B. Information theory, entropy and relative entropy. C. Probabilistic graphical models. D. HMM technicalities, scaling, periodic architectures, state functions, and Dirichlet mixtures. E. List of main symbols and abbreviations. References. Index.

Language, Truth and Logic in Mathematics. By Jaakko Hintikka. Kluwer Academic Publishers. Dordrecht, The Netherlands. (1998). 247 pages. \$99.00, NLG 180.00, GBP 59.00.

Contents:

Origin of the essays. Introduction. 1. What is elementary logic? Independence-friendly logic as the true core area of logic. 2. A revolution in logic? (with Gabriel Sandu). 3. A revolution in the foundations of mathematics? 4. Is there completeness in mathematics after Gödel? 5. Hilbert vindicated? 6. Standard vs. nonstandard distinction: A watershed in the foundations of mathematics. 7. Standard vs. nonstandard logic: Higher-order, modal, and first-order logics. 8. The skeleton in Frege's cupboard: The standard versus nonstandard distinction (with Gabriel Sandu). 9. An alternative concept of computability (with Arto Mutanen). 10. What is the logic of parallel processing? (with Gabriel Sandu). 11. Model minimization—An alternative to circumscription. 12. New foundations for mathematical theories.

Contents:

Preface. Part I. Fundamentals of compilation. 1. Introduction. 2. Lexical analysis. 3. Parsing. 4. Abstract syntax. 5. Semantic analysis. 6. Activation records. 7. Translation to intermediate code. 8. Basic blocks and traces. 9. Instruction selection. 10. Liveness analysis. 11. Register allocation. 12. Putting it all together. Part II. Advanced Topics. 13. Garbage collection. 14. Object-oriented languages. 15. Functional programming languages. 16. Polymorphic types. 17. Dataflow analysis. 18. Loop optimizations. 19. Static single-assignment form. 20. Pipelining and scheduling. 21. The memory hierarchy. Appendix: Tiger language reference manual. Bibliography. Index.

The Netscape Programmer's Guide: Using OLE To Build Componentware Apps. By Richard B. Lam. Cambridge University Press, New York. (1998). 394 pages. \$39.95 (Includes CD ROM).

Contents:

Foreword. Preface. 1. Overview of Netscape client APIs. 2. Introduction to OLE automation. 3. OLE automation tools. 4. Using the DDE interface. 5. Accessing Netscape through OLE. 6. Writing Protocol handlers. 7. Interfacing to Lotus Notes. 8. Custom MIME viewers. 9. Netscape plug-ins. 10. Graphing with JavaScript and plug-ins. Appendix A. DDE topics reference. Appendix B. Netscape OLE automation reference. Appendix C. Netscape plug-ins reference. Index.

Codesign for Real-Time Video Applications. By Jörg Wilberg. Kluwer Academic Publishers, Boston, MA. (1997). 191 pages. \$98.00, NLG 215.00, GBP 64.70.

Contents:

List of figures. List of tables. Acknowledgments. 1. Introduction. 2. Design project: Video compression system. 3. Design methodology. 4. Quantitative analysis. 5. Design tools. 6. HTML-based codesign framework. 7. Results. 8. Conclusions. References. Index.

Brauer Groups, Hopf Algebras and Galois Theory. By Stefaan Caenepeel. Kluwer Academic Publishers, Dordrecht, The Netherlands. (1998). 488 pages. \$197.00, NLG 345.00, GBP 118.00.

Contents:

Preface. I. The Brauer group of a commutative ring. 1. Morita theory for algebras without a unit. 2. Azumaya algebras and Taylor-Azumaya algebras. 3. The Brauer group. 4. Central separable algebras. 5. Amitsur cohomology and étale cohomology. 6. Cohomological interpretation of the Brauer group.

II. Hopf algebras and Galois theory. 7. Hopf algebras. 8. Galois objects. 9. Cohomology over Hopf algebras. 10. The group of Galois (co)objects. 11. Some examples.